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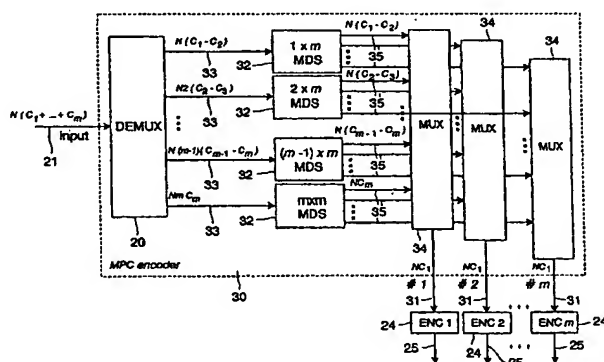
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(54) Title: TRANSMISSION SYSTEM



(57) **Abstract:** Described is a transmission system (10) for transmitting an information signal (21) via a plurality of subchannels from a transmitter (12) to a receiver (16). The transmitter (12) first demultiplexes the information signal (21) into a plurality of information subsignals (33). Next, the information subsignals (33) are encoded according to a code with certain properties, e.g. a maximum distance separable (MDS) code, and multiplexed. Finally, the resulting subsignals (31) are channel encoded and transmitted to the receiver (16). The receiver (16) comprises a channel decoder (46, 52, 76, 128) for successively channel decoding the received subsignals by incorporating decoding information (83, 87, 91) of already channel decoded information subsignals. Next, the resulting subsignals are demultiplexed, decoded according to said code and multiplexed into an output signal. Said code enables input symbols to be encoded into output symbols such that  $k$  input symbols of the  $k$ -th information subsignal are encoded with a  $kxm$ -code into  $m$  output symbols,  $1 \leq k \leq m$ , said code having the following properties: all  $k$  input symbols and all  $m-k$  other output symbols are determinable from any  $k$  output symbols, and no  $m-1$  other output symbols are determinable from any  $l$  output symbols  $l$